AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (original): A crimped carbon fiber having a multilayer structure comprising an inner

layer part and an outer layer part with a hollow structure in the inside thereof, the inner layer part

having a carbon structure containing a herringbone structure, the outer layer part having a carbon

structure differing from the carbon structure of the inner layer part.

2. (original): A crimped carbon fiber having a multilayer structure comprising a center

part and an outer layer part outside the center part with no hollow structure inside thereof, the

center part having a carbon structure containing a shape that carbon layers vertical to the carbon

fiber axis are stacked, the outer layer part having a carbon structure differing from the carbon

structure of the center part.

3. (original): The crimped carbon fiber as claimed in claim 2, wherein the carbon layers

vertical to the carbon fiber axis are in a state that each group comprising one or multiple carbon

layer(s) is continued or joined at an end face with another group to have a multiply folded and/or

ringed cross section.

4. (previously presented): The crimped carbon fiber as claimed in claim 1, wherein the

carbon structure of the outer layer part contains a tree-growth-ring structure.

5. (previously presented):   The crimped carbon fiber as claimed in claim 1, wherein a percentage crimp defined by the following formula is 0.5% or more:

Percentage crimp (%) = (fiber length - distance between fiber terminals)/(fiber length) ×

100   (1)

6. (previously presented):   The crimped carbon fiber as claimed in claim 1, which has a fiber outer diameter of from 2 to 500 nm and a fiber length of 50 μm or less.

7. (previously presented):   The crimped carbon fiber as claimed in claim 1, which has an actually measured specific surface area 1.5 times or more the specific surface area in terms of fiber diameter defined by the following formula (2):

Specific surface area in terms of fiber diameter (m^2/g) = 2,000/fiber outer diameter

(nm)   (2)

8. (previously presented):   The crimped carbon fiber as claimed in claim 1, which has a lattice spacing (d002) of 002-plane measured by X-ray diffraction of less than 0.34 nm, and a ratio (Id/Ig) between a peak height (Id) in a band of 1340-1349 cm^{-1} and a peak height (Ig) in a band of 1570-1578 cm^{-1} of Raman spectrum of more than 0.35.

9. (previously presented):   The crimped carbon fiber as claimed in claim 1, which is a vapor grown carbon fiber.

10. (previously presented):   A carbon fiber mixture comprising 5 vol% or more of the crimped carbon fiber claimed in claim 1.

11. to 18. (canceled).